Palisades
3Q/2003 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Incorrect Potential Transformer Fuses Removed
A finding was self-revealed when work order instructions were not followed and incorrect potential transformer fuses were removed on safety-related 2400-Volt Bus 1D with the plant in Mode 6 (Refueling). Removal of the incorrect fuses caused a loss of service air to the steam generator nozzle dams and resulted in primary coolant system leakage past the nozzle dams. The primary cause of this finding was related to the cross-cutting area of human performance.

This finding was more than minor because if left uncorrected it would become a more significant safety concern. The finding was of very low safety significance because the event did not result in an inadvertent change in primary coolant system temperature or a significant loss of refueling cavity level. One Non-Cited Violation of Technical Specification 5.4.1 was identified.
Inspection Report# : 2003004*(pdf)*

Significance: G Apr 04, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Follow Operating Procedures
A finding of very low safety significance was self-revealed during an event when an operator failed to adhere to a procedure for operating the chemical volume control system and repeatedly attempted to close a charging pump breaker after the breaker tripped. In addition, the operator failed to trip primary coolant pumps before primary coolant system pressure dropped below the minimum pressure for primary coolant pump operation. The primary cause of this finding was related to the cross-cutting area of Human Performance.

The finding was more than minor because it could be reasonably viewed as a precursor to a significant event. The repeated operation of an electrical breaker contrary to procedural requirements was a contributing cause to the March 18, 2003, cable spreading room fire. The finding was determined to be of low safety significance because the failure to follow the procedure did not result in a loss of shutdown cooling or loss of reactor inventory. This issue was determined to be a Non-Cited Violation of Technical Specification 5.4.1, which required the implementation of written procedures covering the chemical volume control system and the reactor coolant system.
Inspection Report# : 2003005*(pdf)*

Significance: G Apr 04, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Have Adequate Maintenance Procedures
A finding of very low safety significance was self-revealed during an event when the licensee failed to have adequate

maintenance procedures in place to ensure that when an electrical breaker was removed to be refurbished, that the arc chutes were reinstalled before the breaker was placed back in service.

The finding was more than minor because it could be reasonably viewed as a precursor to a significant event since a fire resulted in the P-55A charging pump breaker when the arc chutes were not reinstalled after the breaker had been refurbished. The finding was determined to be of low safety significance because the failure to follow the procedure did not result in a loss of shutdown cooling or loss of reactor inventory. This issue was determined to be a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings."
Inspection Report# : 2003005*(pdf)*

Significance: G Dec 28, 2002
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Rigorously Evaluate Industry Operating Experience Information which Resulted in Inadequate Preventive Maintenance Activities being Developed for the 345 KV Transmission Lines
The inspectors determined that a self-revealed Green finding was associated with a Non-Cited Violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," for the failure to rigorously evaluate industry operating experience information which resulted in inadequate preventive maintenance activities being developed for the 345 Kilo-Volt (KV) transmission lines that connect the plant and the switchyard. Consequently, on December 1, 2002, a connector holding a static wire on the 345 KV transmission line towers between the plant and the switchyard failed. As a result, the static line contacted one phase of the 345 KV lines as well as all three phases of the 345 KV Rear Bus in the switchyard which caused an automatic plant trip on loss of generator load and a loss of startup power. This self-revealed finding was determined to be of very low safety significance by the significance determination process because: (1) the finding did not contribute to the likelihood of a Primary or Secondary system Loss of Coolant Accident initiator; (2) the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available; and (3) the finding did not increase the likelihood of a fire or internal/external flood.
Inspection Report# : 2002009*(pdf)*

Mitigating Systems

Significance: G Mar 31, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Corrective Actions to Address Scaffolding Control Problems
The inspectors identified a finding for the failure to implement adequate corrective actions to prevent recurrence of issues associated with the construction of seismic scaffolding near safety-related systems.

This finding was more than minor because if left uncorrected it would become a more significant safety concern in that inadequately constructed scaffold could affect the availability of mitigating systems during a seismic event. The finding was of very low safety significance because the finding did not screen as potentially risk significant due to a seismic initiating event and did not involve the total loss of any safety function that contributes to core damage accident sequences initiated by seismic events. The inspectors also determined that this finding represented continued human performance deficiencies in the construction of seismic scaffolding near safety-related systems. A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was identified.

Inspection Report# : 2003002*(pdf)*

Significance: G Dec 28, 2002
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Adequately Evaluate the Root Cause of a Leak in 1992 on the Instrument Line for Safety Injection Tank T-82D
The inspectors determined that a self-revealed Green finding was associated with a Non-Cited Violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," for the failure to adequately evaluate the root cause in 1992 of a leak that occurred on the instrument line for Safety Injection Tank T-82D. Consequently, past corrective actions were not adequate to prevent the leak from recurring on November 11, 2002. As a result, T-82D was rendered inoperable and unavailable to perform the intended safety function of injecting borated water to the reactor during a large break loss of coolantaccident. In addition, a NOED had to be issued to extend Technical Specification Limiting Condition 3.5.1, "Safety Injection Tanks," allowed outage time by 24 hours so that repairs could be completed to restore T-82D to an operable status without having to shut down the plant. This self-revealed finding was determined to be of very low safety significance by the significance determination process because: (1) the safety injection tanks were only credited for large break loss of coolant accidents; and (2) the exposure time for the inoperable safety injection tank was less than 3 days.
Inspection Report# : 2002009*(pdf)*

Significance: G Nov 22, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to adequately implement procedural requirements for the control of scaffolding in the vicinity of safety-related equipment, contrary to the requirements of TS 5.4.1, "Procedures."
The inspectors identified a finding of very low safety significance that is being treated as a Non-Cited Violation of Technical Specification 5.4.1 "Procedures." The licensee failed to adequately implement scaffold control requirements contained in procedure MSM-M-43, "Scaffolding." Seismic scaffolding erected over Component Cooling Water (CCW) pump P-52A was anchored to a safety related pipe support for CCW pump P-52B without engineering evaluation and approval.

The finding was greater than minor because the finding would become a more significant concern if left uncorrected. The failure of scaffolding installed in the vicinity of safety-related equipment during a seismic event could result in damage to mitigating equipment. The finding was of very low safety significance because it did not result in the actual loss of the safety function of the train or system.
Inspection Report# : 2002010*(pdf)*

Barrier Integrity

Significance: G Sep 30, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Degraded Motor Bearing in Containment Air Cooler Fan V-4A
A finding of very low safety significance was self-revealed when the Containment Air Cooler Fan V-4A motor bearing

failed and the fan tripped unexpectedly on July 1, 2003, after the fan was declared operable and returned to service following emergent repairs on June 20, 2003. A lack of rigor in the technical evaluation to determine the operability for Fan V-4A on June 20 resulted in the fan being declared operable and returned to service with more significant motor bearing degradation than recognized by licensee personnel. The primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution.

The finding was more than minor because the finding was associated with the Human Performance attribute of the barrier integrity cornerstone and adversely impacted the cornerstone objective to provide reasonable assurance that the containment barrier protect the public from radionuclide releases caused by accidents or events. The finding was of very low safety significance because there was no adverse impact on the physical integrity of reactor containment and there was no adverse impact on the atmospheric pressure control function of the reactor containment. Corrective actions to address the issue included replacing the motor for Fan V-4A and entering all containment air cooler fans and motors into a predictive maintenance program. One Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was identified.
Inspection Report# : 2003006*(pdf)*

Significance:  Mar 31, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Testing of the Fueling Handling Area Ventilation System
The inspectors identified a finding for the failure to ensure that testing of the fuel handling area ventilation system was performed in accordance with test procedures which incorporated the appropriate requirements and acceptance limits specified in Technical Specification 5.5.10, "Ventilation Filter Testing Program."

This finding was more than minor because if left uncorrected it would become a more significant safety concern in that the radiological barrier function provided by the fuel handling area ventilation system was degraded and was not being tested adequately. The finding was of very low safety significance because the
finding represented a degradation of only the radiological barrier function provided for the spent fuel pool. The inspectors also determined that this finding was a result of human performance deficiencies related to developing and implementing the Technical Specification surveillance. A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XI, "Test Control," was identified.
Inspection Report# : 2003002*(pdf)*

Significance:  Mar 31, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Restore an Inoperable Channel of Hydrogen Monitoring
The inspectors determined that a self-revealed finding was associated with the failure to restore an inoperable channel of containment hydrogen monitoring within the allowed outage times specified in Technical Specification Action Statements 3.3.7.A and 3.3.7.D.

The finding was more than minor because the barrier integrity cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events was affected. The finding was determined to be of very low safety significance after a Region III Senior Reactor Analyst, in conjunction with the inspectors, performed a SDP Phase 3 assessment. Utilizing NUREG-1675, "Basis Document for Large Early Release Frequency Significance Determination Process," the analyst determined that the significance threshold for large early release frequency of 100 volume percent per day leak rate from containment would not be exceeded. The inspectors also noted that this finding was attributable to a latent human performance deficiency which

occurred during the April 2001 refueling outage, but was self-revealed in December 2002. A Non-Cited Violation of Technical Specification Section 3.3.7 was identified.
Inspection Report# : 2003002*(pdf)*

Significance: G Dec 28, 2002
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Promptly Identify and Correct Problems Regarding the Operation of Mechanical Equipment Room Door-16
The inspectors determined that a self-revealed Green finding was associated with a Non-Cited Violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," for the failure to promptly identify and correct problems regarding the operation of Mechanical Equipment Room Door-16, which resulted in the door failing in the open position of October 10, 2002. This self-revealed finding was determined to be of very low safety significance by the significance determination process because the finding represented a degradation of only the radiological barrier function for the control room.
Inspection Report# : 2002009*(pdf)*

Emergency Preparedness

Significance: G Feb 07, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Critique Per 10 CFR 50.47 (b)(14) Two Instances in the First Quarter of 2002 as being Unsuccessful Drill and Exercise Performance (DEP) Indicator Data to NRC.
A finding of very low safety significance was identified. The finding was due to an inadequate critique of two DEP indicator opportunities that occurred during licensed operator training sessions in the first quarter of 2002. The licensee's critique process failed to identify that the completed emergency notification forms to simulated State and county officials were not marked to indicate whether the notification was associated with a drill or an actual emergency in accordance with regulatory guidance, NEI 99-02, Regulatory Assessment Performance Indicator Guideline, regarding the accuracy of such notifications.

The critique failure was considered to be greater than minor because it involved the DEP indicator's value exceeding the threshold between the licensee response (Green) band and the regulatory response (White) band. The critique failure also affected the Emergency Response Organization Performance attribute of the Emergency Preparedness Cornerstone. Since the critique failure was in not identifying that the two notification forms were not marked to indicate whether the notification was associated with a drill or an actual emergency, rather than a risk significant topic (i.e., an incorrect emergency classification, an incorrect protective action recommendation, or an untimely notification), the critique failure is a finding of very low safety significance (Green). Because of the very low safety significance of the finding and because the licensee addressed the finding in its corrective action program, this violation of 10 CFR 50.47(b)(14) is being treated as a Non-Cited Violation.
Inspection Report# : 2003003*(pdf)*

Occupational Radiation Safety

Significance: G Apr 15, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Obtain a Radiological Briefing Prior to Entry into a High Radiation Area
A finding of very low safety significance was self-revealed when two workers entered a high radiation area to move a drum and trash bags of radioactive material out of the area without obtaining a briefing regarding the radiological conditions in the area.

The issue was associated with the Human Performance attribute of the Occupational Radiation Safety Cornerstone and affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation from radioactive material because the workers were not sufficiently cognizant of the radiation fields they could have encountered while inside the high radiation area. The finding was of very low safety significance because the radiological conditions the workers could have encountered were not sufficient to produce a substantial potential for an exposure in excess of regulatory limits. To address this issue, the individuals involved were administratively precluded from entering the Radiologically Controlled Area for the remainder of the outage. Additionally, training to reinforce radiation protection standards and expectations was provided to radiation workers. One Non-Cited Violation for the failure to meet the requirements of Technical Specification 5.7.1.e for the conduct of pre-entry high radiation area briefings was identified.

Inspection Report# : 2003006*(pdf)*

Significance: G Apr 15, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Meet Radiation Work Permit Requirements Upon Receipt of an Electronic Dosimetry Alarm
A finding of very low safety significance was self-revealed when a worker failed to stop work and contact radiation protection personnel upon receiving an electronic dosimetry dose rate alarm while rigging a drum of radioactive material to be removed from a posted high radiation area.

The issue was associated with the Human Performance attribute of the Occupational Radiation Safety Cornerstone and affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation from radioactive material because the failure to appropriately act upon hearing the alarm was a failure of the radiation safety barrier against unplanned and unintended radiation exposures. The finding was of very low safety significance because the dose rates encountered and the worker's short time period within the dose rate field were not sufficient to produce a substantial potential for an exposure in excess of regulatory limits. To address this issue, the individuals involved were administratively precluded from entering the Radiologically Controlled Area for the remainder of the outage. Additionally, training to reinforce radiation protection standards and expectations was provided to radiation workers. One Non-Cited Violation for the failure to meet the requirements of Technical Specification 5.7.1.b regarding the control of activities in a high radiation area through a radiation work permit was identified.
Inspection Report# : 2003006*(pdf)*

Significance: G Apr 15, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Barricade and Post a High Radiation Area
A finding of very low safety significance was self-revealed when a drum and trash bags of radioactive material were

moved and created an unposted and unbarricaded high radiation area.

The issue was associated with the Human Performance and Program and Process attributes of the Occupational Radiation Safety Cornerstone and affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation from radioactive material because the uncontrolled high radiation area created the potential for unplanned and unintended dose to individuals working in the proximity of the drum and trash bags. The finding was of very low safety significance because the dose rates were not sufficient to produce a substantial potential for an exposure in excess of regulatory limits. Upon discovery, the licensee took immediate corrective actions to properly post the high radiation area. Additionally, further surveys were conducted to verify that no other unknown radiological conditions existed. One Non-Cited Violation for the failure to meet the requirements of Technical Specification 5.7.1.a regarding barricading and posting a high radiation area was identified.
Inspection Report# : 2003006*(pdf)*

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: N/A Nov 22, 2002
Identified By: NRC
Item Type: FIN Finding
Summary Conclusion PI & R Inspection
In general, the plant identified issues and entered them into the corrective action process at an appropriate low-level, although some exceptions to this practice were identified. Nuclear Oversight assessment reports identified issues for the plant to resolve, including issues with corrective action follow through. The majority of issues reviewed were properly categorized and evaluated although some evaluations were narrowly focused, particularly for apparent cause evaluations and extent of condition reviews. Most corrective actions reviewed were appropriately implemented; however, some examples, including one inspection finding, were identified regarding corrective actions that were not fully implemented or fully effective in correcting the identified problem. Corrective action follow-through and effectiveness is one aspect of the corrective action process that could be strengthened to reduce repeat issues at the plant.
Inspection Report# : 2002010*(pdf)*

Last modified : December 01, 2003